

Northern Powergrid (Northeast) Ltd

Use of System Charging Statement

Notice of Charges

Effective from

1 April 2018

Version 3.0

Version Control

Version	Date	Description of version and any changes made
1.0	21 Dec 2016	This statement is based on version 0.5 of the common template developed during 2016.
1.0	03 Apr 2017	The form of this statement was approved by Ofgem on 31 March 2017. No changes to previous version
2.0	10 Jan 2018	This statement has been revised to update Annex 5 based on the 2017 losses submission.
3.0	08 Feb 2018	This statement has been revised to update Annex 1 to include an amendment to charges to recover a claim for a last resort supply payment (LRSP) received from Co-operative Energy Limited in January 2018. Details of the LRSP have also been provided in section 9 of this statement.
3.0	10 Apr 2018	The form of this statement was approved by Ofgem on 10 April 2018. No changes to previous version.

A change-marked version of this statement can be provided upon request.

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1. Introduction

- 1.1. This statement tells you about our charges and the reasons behind them. It has been prepared consistent with Standard Licence Condition 14 of our Electricity Distribution Licence. The main purpose of this statement is to provide our schedule of charges¹ for the use of our Distribution System and to provide the schedule of adjustment factors² that should be applied in Settlement to account for losses from the Distribution System. We have also included guidance notes in Appendix 2 to help improve your understanding of the charges we apply.
- 1.2. Within this statement we use terms such as 'Users' and 'Customers' as well as other terms which are identified with initial capitalisation. These terms are defined in the glossary.
- 1.3. The charges in this statement are calculated using the Common Distribution Charging Methodology (CDCM) for Low Voltage and High Voltage (LV and HV) Designated Properties and the Extra-High Voltage Distribution Charging Methodology (EDCM) for Designated Extra-High Voltage (EHV) Properties.
- 1.4. Separate charges are calculated depending on the characteristics of the connection and whether the use of the Distribution System is for demand or generation purposes. Where a generation connection is seen to support the Distribution System the charges will be negative and the Supplier will receive credits for exported energy.
- 1.5. The application of charges to a premise can usually be referenced using the Line Loss Factor Class (LLFC) contained in the charge tables. Further information on how to identify and calculate the charge that will apply for your premises is provided in the guidance notes in Appendix 2.
- 1.6. All charges in this statement are shown exclusive of VAT. Invoices will include VAT at the applicable rate.
- 1.7. The annexes that form part of this statement are also available in spreadsheet format. This spreadsheet contains supplementary information used for charging purposes and a simple model to assist you to calculate charges. This spreadsheet can be downloaded from:

http://www.northernpowergrid.com/document-library/charges

¹ Charges can be positive or negative.

² Also known as Loss Adjustment Factors or Line Loss Factors

Validity period

1.8. This charging statement is valid for services provided from the effective from date

stated on the front of this statement and remains valid until updated by a revised

version or superseded by a statement with a later effective date.

1.9. When using this charging statement, care should be taken to ensure that the

statement or statements covering the period that is of interest are used.

1.10. Notice of any revision to the statement will be provided to Users of our Distribution

System. The latest statements can be downloaded from:

http://www.northernpowergrid.com/document-library/charges

Contact details

1.11. If you have any questions about this statement please contact us at this address:

Charges Manager

Northern Powergrid

98 Aketon Road

Castleford

WF10 5DS

e-mail:- UoS.Charges@northernpowergrid.com

1.12. All enquiries regarding connection agreements and changes to maximum capacities

should be addressed to:

Connection Record Maintenance

Northern Powergrid

Manor House

Station Road

New Penshaw

Houghton-le-Spring

DH4 7LA

e-mail:- connection.records@northernpowergrid.com

2. Charge application and definitions

- 2.1. The following section details how the charges in this statement are applied and billed to Users of our Distribution System.
- 2.2. We utilise two billing approaches depending on the type of metering data received. The 'Supercustomer' approach is used for Non-Half-Hourly (NHH) metered, NHH unmetered, Half-Hourly (HH) metered premises with whole current Metering Systems, and all domestic premises. The 'Site-specific' approach is used for non-domestic Current Transformer (CT) metered premises or pseudo HH unmetered premises.
- 2.3. Typically NHH metered or HH metered premises with whole current Metering Systems are domestic and small businesses. Premises with non-domestic CT Metering Systems are generally larger businesses or industrial sites; and unmetered premises are normally streetlights.

Supercustomer billing and payment

- 2.4. Supercustomer billing and payment applies to Meter Point Administration Numbers (MPANs) registered as NHH metered, NHH unmetered or aggregated HH metered. The Supercustomer approach makes use of aggregated data obtained from Suppliers using the 'Aggregated DUoS Report' data flow.
- 2.5. Invoices are calculated on a periodic basis and sent to each User, for whom we transport electricity through our Distribution System. Invoices are reconciled, over a period of approximately 14 months to reflect later and more accurate consumption figures.
- 2.6. The charges are applied on the basis of the LLFC assigned to the MPAN, and the units consumed within the time periods specified in this statement. All LLFCs are assigned at our sole discretion based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect.

Supercustomer charges

- 2.7. Supercustomer charges include the following components:
 - a fixed charge pence/MPAN/day, there will only be one fixed charge applied to each MPAN; and
 - unit charges pence/kilowatt-hour (kWh); more than one kWh charge may apply depending on the type of tariff for which the MPAN is registered.

- 2.8. Users who wish to supply electricity to a Customer whose MPAN is registered as Measurement Class A, B, F or G will be allocated the relevant charge structure set out in Annex 1.
- 2.9. Measurement class A charges apply to Exit/Entry Points where NHH metering is used for Settlement.
- 2.10. Measurement class B charges apply to Exit Points deemed to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001³ and where operated in accordance with Balancing and Settlement Code (BSC) procedure 520⁴.
- 2.11. Measurement Class F charges apply to Exit/Entry Points at domestic premises where HH metering is used for Settlement.
- 2.12. Measurement Class G charges apply to Exit/Entry Points at non-domestic premises with whole current Metering Systems where HH metering is used for Settlement.
- 2.13. Identification of the appropriate charge can be made by cross reference to the LLFC.
- 2.14. Valid settlement Profile Class (PC)/Standard Settlement Combination (SSC)/Meter Timeswitch Code (MTC) combinations for these LLFCs where the Metering System is Measurement Class A and B are detailed in Market Domain Data (MDD).
- 2.15. Where an MPAN has an invalid Settlement combination, the 'Domestic Unrestricted' fixed and unit charge will be applied as default until the invalid combination is corrected. Where there are multiple SSC/Time Pattern Regime (TPR) combinations, the default 'Domestic Unrestricted' fixed and unit charge will be applied for each invalid SSC/TPR combination.
- 2.16. The time periods for unit charges where the Metering System is Measurement Class A and B are as specified by the SSC. To determine the appropriate charge rate for each SSC/TPR a look-up table is provided in the spreadsheet that accompanies this statement⁵.
- 2.17. The time periods for unit charges where the Metering System is Measurement Class F and G are set out in the table 'Time Bands for Half Hourly Metered Properties' in Annex 1.
- 2.18. The 'Domestic Off-Peak' and 'Small Non-Domestic Off-Peak' charges are supplementary to either an unrestricted or a two-rate charge.

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³ The Electricity (Unmetered Supply) Regulations 2001 available from http://www.legislation.gov.uk/uksi/2001/3263/made

⁴ Balancing and Settlement Code Procedures on unmetered supplies are available from https://www.elexon.co.uk/bsc-related-documents/bscps/

⁵ Northern Powergrid (Northeast) - Schedule of Charges and Other Tables Final 2018-19

Site-specific billing and payment

- 2.19. Site-specific billing and payment applies to Measurement Class C, D and E Metering Systems. The site-specific billing and payment approach to Use of System (UoS) billing makes use of HH metering data at premises level received through Settlement.
- 2.20. Invoices are calculated on a periodic basis and sent to each User, for whom we transport electricity through our Distribution System. Where an account is based on estimated data, the account shall be subject to any adjustment which may be necessary following the receipt of actual data from the User.
- 2.21. The charges are applied on the basis of the LLFC assigned to the MPAN (or the Metering System Identifier (MSID) for Central Volume Allocation (CVA) sites), and the units consumed within the time periods specified in this statement.
- 2.22. All LLFCs are assigned at our sole discretion based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to section 'Incorrectly Allocated Charges' if you believe the allocated LLFC or tariff is incorrect.

Site-specific billed charges

- 2.23. Site-specific billed charges may include the following components:
 - a fixed charge, pence/MPAN/day or pence/MSID/day;
 - a capacity charge, pence/kVA/day, for Maximum Import Capacity (MIC) and/or Maximum Export Capacity (MEC);
 - an excess capacity charge, pence/kVA/day, if a site exceeds its MIC and/or MEC;
 - unit charges, pence/kWh, more than one unit charge may be applied; and
 - an excess reactive power charge, pence/kVArh, for each unit in excess of the reactive charge threshold.
- 2.24. Users who wish to supply electricity to Customers whose Metering System is Measurement Class C, D, E or is settled via CVA will be allocated the relevant charge structure dependent upon the voltage and location of the Metering Point.
- 2.25. Measurement Class C, E or CVA charges apply to Exit/Entry points where HH metering data is used for Settlement purposes for non-domestic sites that have CT metering.
- 2.26. Measurement class D charges apply to Exit Points deemed to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001⁶ and where operated in accordance with BSC procedure 520⁷.

⁶ The Electricity (Unmetered Supply) Regulations 2001 available from http://www.legislation.gov.uk/uksi/2001/3263/made

⁷ Balancing and Settlement Code Procedures on unmetered supplies and available from https://www.elexon.co.uk/bsc-related-documents/bscps/

- 2.27. Fixed charges are generally levied on a pence per MPAN/MSID per day basis. Where two or more HH MPANs/MSIDs are located at the same point of connection (as identified in the Connection Agreement), with the same LLFC, and registered to the same Supplier, only one daily fixed charge will be applied.
- 2.28. LV and HV Designated Properties will be charged in accordance with the CDCM and allocated the relevant charge structure set out in Annex 1.
- 2.29. LV and HV Designated Properties which utilise a combination of Intermittent or Non-Intermittent generation technologies metered through a single MPAN/MSID will be allocated the Non-Intermittent generation tariff unless the combined installed capacity, as evidenced in ratings contained in the Connection Agreement, for Intermittent generation technologies is higher than the combined installed capacity for Non-Intermittent generation technologies, in which case the Intermittent generation tariff will be allocated.
- 2.30. Designated EHV Properties will be charged in accordance with the EDCM and allocated the relevant charge structure set out in Annex 2.
- 2.31. Where LV and HV Designated Properties or Designated EHV Properties have more than one point of connection (as identified in the connection agreement) then separate charges will be applied to each point of connection.
- 2.32. Due to the seasonal nature of charges for Unmetered Supplies, changes between Measurement Classes B and D (or vice versa) shall not be agreed except with effect from 1 April in any charging year.

Time periods for half-hourly metered properties

- 2.33. The time periods for the application of unit charges to LV and HV Designated Properties that are HH metered are detailed in Annex 1. We have not issued a notice to change the time bands.
- 2.34. The time periods for the application of unit charges to Designated EHV Properties are detailed in Annex 2. We have not issued a notice to change the time bands.

Time periods for pseudo half-hourly unmetered properties

2.35. The time periods for the application of unit charges to Unmetered Supply Exit Points that are pseudo HH metered are detailed in Annex 1. We have not issued a notice to change the time bands.

Application of capacity charges

2.36. The following sections explain the application of capacity charges and exceeded capacity charges.

Chargeable capacity

- 2.37. The chargeable capacity is, for each billing period, the MIC/MEC, as detailed below.
- 2.38. The MIC/MEC will be agreed with us at the time of connection or pursuant to a later change in requirements. Following such an agreement (be it at the time of connection or later) no reduction in MIC/MEC will be allowed for a 12 month period.
- 2.39. Reductions to the MIC and/or MEC may only be permitted once in a 12 month period. Where the MIC and/or MEC is reduced, the new lower level will be agreed with reference to the level of the Customer's maximum demand. The new MIC and/or MEC will be applied from the start of the next billing period after the date that the request was received. It should be noted that, where a new lower level is agreed, the original capacity may not be available in the future without the need for network reinforcement and associated charges.
- 2.40. In the absence of an agreement, the chargeable capacity, save for error or omission, will be based on the last MIC and/or MEC previously agreed by us for the relevant premise's connection. A Customer can seek to agree or vary the MIC and/or MEC by contacting us using the contact details in section 1.

Exceeded capacity

2.41. Where a Customer takes additional, unauthorised capacity over and above the MIC/MEC, the excess will be classed as exceeded capacity. The exceeded portion of the capacity will be charged at the excess capacity charge p/kVA/day rate, based on the difference between the MIC/MEC and the actual capacity used. This will be charged for the full duration of the billing period in which the breach occurs.

Demand exceeded capacity

Demand Exceeded Capacity =
$$\max \left(2 \times \sqrt{AI^2 + \max(RI, RE)^2} - MIC, 0\right)$$

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MIC = Maximum import capacity (kVA)

2.42. Only reactive import and reactive export values occurring at times of active import are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above. 2.43. This calculation is completed for every half hour and the maximum value from the billing period is applied.

Generation exceeded capacity

Generation Exceeded Capacity =
$$\max \left(2 \times \sqrt{AE^2 + \max(RI,RE)^2} - MEC, 0\right)$$

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MEC = Maximum export capacity (kVA)

- 2.44. Only reactive import and reactive export values occurring at times of active export are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values occurring at times of kWh export are summated prior to the calculation above.
- 2.45. This calculation is completed for every half hour and the maximum value from the billing period is applied.

Standby capacity for additional security on site

2.46. Where standby capacity charges are applied, the charge will be set at the same rate as that applied to normal MIC. Should a Customer's request for additional security of supply require the provision of capacity from two different sources, we reserve the right to charge for the capacity held at each source.

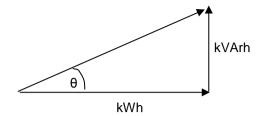
Minimum capacity levels

2.47. There is no minimum capacity threshold.

Application of charges for excess reactive power

- 2.48. When an individual HH metered MPAN's reactive power (measured in kVArh) at LV and HV Designated Properties exceeds 33% of its total active power (measured in kWh), excess reactive power charges will apply. This threshold is equivalent to an average power factor of 0.95 during the period. Any reactive units in excess of the 33% threshold are charged at the rate appropriate to the particular charge.
- 2.49. Power Factor is calculated as follows:

 $Cos \theta = Power Factor$



2.50. The chargeable reactive power is calculated as follows:

Demand chargeable reactive power

Demand Chargeable kVArh =
$$\max\left(\max(RI,RE) - \left(\sqrt{\frac{1}{0.95^2} - 1} \times AI\right), 0\right)$$

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

- 2.51. Only reactive import and reactive export values occurring at times of active import are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above.
- 2.52. The square root calculation will be to two decimal places.
- 2.53. This calculation is completed for every half hour and the values summated over the billing period.

Generation chargeable reactive power

Generation Chargeable kVArh =
$$\max\left(\max(RI,RE) - \left(\sqrt{\frac{1}{0.95^2} - 1} \times AE\right), 0\right)$$

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

2.54. Only reactive import and reactive export values occurring at times of active export are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above.

- 2.55. The square root calculation will be to two decimal places.
- 2.56. This calculation is completed for every half hour and the values summated over the billing period.

Incorrectly allocated charges

- 2.57. It is our responsibility to apply the correct charges to each MPAN/MSID. The allocation of charges is based on the voltage of connection, import/export details, metering information, and, for some tariffs, the metering location. Where an MPAN/MSID is used for export purposes, the type of generation (intermittent or non-intermittent) also determines the allocation of charges. Where MPANs have not been associated, for example when multiple points of connection fed from different sources are used for a single site, the relevant number of fixed charges will be applied.
- 2.58. We are responsible for deciding the voltage of connection. Generally, this is determined by where the metering is located and where responsibility for the electrical equipment transfers from us to the connected Customer.
- 2.59. The Supplier determines and provides us with the metering information and data. This enables us to allocate charges where there is more than one charge per voltage level. The metering information and data is likely to change over time if, for example, a Supplier changes from a two rate meter to a single rate meter. When we are notified this has happened, we will change the allocation of charges accordingly.
- 2.60. If it has been identified that a charge may have been incorrectly allocated due to the metering information and/or data then a request for investigation should be made to the Supplier.
- 2.61. Where it has been identified that a charge may have been incorrectly allocated due to the wrong voltage of connection, import/export details or metering location, then a request to investigate the applicable charges should be made to us. Requests from persons other than the Customer or the current Supplier must be accompanied by a Letter of Authority from the Customer; the current Supplier must also acknowledge that they are aware a request has been made. Any request must be supported by an explanation of why it is believed that the current charge should be changed, along with supporting information including, where appropriate, photographs of metering positions or system diagrams. Any request to change the current charge that also includes a request for backdating must include justification as to why it is considered appropriate to backdate the change.
- 2.62. An administration charge (covering our reasonable costs) may be made if a technical assessment or site visit is required, but we will not apply any charge where we agree to the change request.

- 2.63. Where we agree that the current charge should be changed, then we will allocate the appropriate set of charges for the connection. Any adjustment will be applied from the date of the request, back to the date of the incorrect allocation; or up to the maximum period specified by the Limitation Act (1980) in England and Wales, which covers a six year period from the date of request; whichever is the shorter.
- 2.64. Any credit or additional charge will be issued to the relevant Supplier(s) who were effective during the period of the change.
- 2.65. Should we reject the request a justification will be provided to the requesting party. We shall not unreasonably withhold or delay any decision on a request to change the charges applied and would expect to confirm our position on the request within three months from the date of request.

Generation charges for pre-2005 Designated EHV Properties

- 2.66. Designated EHV Properties that were connected to the Distribution System under a pre-2005 connection charging policy are eligible for exemption from UoS charges for generation unless one of the following criteria has been met:
 - 25 years have passed since their first energisation/connection date (i.e. Designated EHV Properties with energisation/Connection Agreements dated prior to 1st April 2005, and for which 25 years has passed since their first energisation/connection date will receive generation UoS charges from the next charging year following the expiry of their 25 years exemption, starting 1st April), or
 - the person responsible for the Designated EHV Property has provided notice to Northern Powergrid that they wish to opt in to generation UoS charges.

If a notice to opt in has been provided there will be no further opportunity to opt out.

2.67. Furthermore, if an exempt Customer makes an alteration to its export requirement then the Customer may be eligible to be charged for the additional capacity required or energy imported or exported. For example, where a generator increases its export capacity the incremental increase in export capacity will attract UoS charges as other non-exempt generators.

Provision of billing data

2.68. Where HH metering data is required for UoS charging and this is not provided in accordance with the BSC or the Distribution Connection and Use of System Agreement (DCUSA) through settlement processes, such metering data shall be provided by the User of the system in respect of each calendar month within five working days of the end of that calendar month.

- 2.69. The metering data shall identify the amount of energy conveyed across the Metering System in each half hour of each day and shall separately identify active and reactive import and export. Metering data provided to us shall be consistent with that received through the metering equipment installed.
- 2.70. Metering data shall be provided in an electronic format specified by us from time to time, and in the absence of such specification, metering data shall be provided in a comma-separated text file in the format of Master Registration Agreement (MRA) data flow D0036⁸ (as agreed with us). The data shall be e-mailed to:

Duos.billing@northernpowergrid.com

2.71. We require details of reactive power imported or exported to be provided for all Measurement Class C and E sites. It is also required for CVA sites and Exempt Distribution Network boundaries with difference metering. We reserve the right to levy a charge on Users who fail to provide such reactive data. In order to estimate missing reactive data, a power factor of 0.95 lag will be applied to the active consumption in any half hour.

Out of area use of system charges

2.72. We do not operate networks outside our Distribution Services Area.

Licensed distribution network operator charges

- 2.73. Licenced Distribution Network Operator (LDNO) charges are applied to LDNOs who operate Embedded Networks within our Distribution Services Area.
- 2.74. The charge structure for LV and HV Designated Properties embedded in networks operated by LDNOs will mirror the structure of the 'All-the-way' charge and is dependent upon the voltage of connection of each embedded network to the host DNO's network. The same charge elements will apply as those that match the LDNO's end Customer charges. The relevant charge structures are set out in Annex 4.
- 2.75. Where a NHH metered MPAN has an invalid settlement combination, the 'LDNO HV: Domestic Unrestricted' fixed and unit charge will be applied as default until the invalid combination is corrected. Where there are multiple SSC/TPR combinations, the default 'LDNO HV: Domestic Unrestricted' fixed and unit charge will be applied for each invalid SSC/TPR combination.
- 2.76. The charge structure for Designated EHV Properties embedded in networks operated by LDNOs will be calculated individually using the EDCM. The relevant charge structures are set out in Annex 2.

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⁸ MRA Data Transfer Catalogue available from https://dtc.mrasco.com/

2.77. For Nested Networks the relevant charging principles set out in DCUSA Schedule 21⁹ will apply.

Licence exempt distribution networks

- 2.78. The Electricity and Gas (Internal Market) Regulations 2011¹⁰ introduced new obligations on owners of licence exempt distribution networks (sometimes called private networks) including a duty to facilitate access to electricity and gas suppliers for Customers within those networks.
- 2.79. When Customers (both domestic and commercial) are located within a licence exempt distribution network and require the ability to choose their own Supplier this is called 'third party access'. These embedded Customers will require an MPAN so that they can have their electricity supplied by a Supplier of their choice.
- 2.80. Licence exempt distribution network owners can provide third party access using either full settlement metering or the difference metering approach.

Full settlement metering

- 2.81. This is where a licence exempt distribution network is set up so that each embedded installation has an MPAN and Metering System and therefore all Customers purchase electricity from their chosen Supplier. In this case there are no Settlement Metering Systems at the boundary between the licensed Distribution System and the exempt distribution network.
- 2.82. In this approach our UoS charges will be applied to each MPAN.

Difference metering

2.83. This is where one or more, but not all, Customers on a licence exempt distribution network choose their own Supplier for electricity supply to their premises. Under this approach the Customers requiring third party access on the exempt distribution network will have their own MPAN and must have a HH Metering System.

Gross settlement

2.84. Where one of our MPANs (prefix 15) is embedded within a licence exempt distribution network connected to our Distribution System, and a dispensation for difference metering is in place for settlement purposes, and we receive gross measurement data for the boundary MPAN, we will continue to charge the boundary MPAN Supplier for use of our Distribution System. No charges will be levied by us directly to the

⁹ The Distribution and Connection Use of System Agreement (DCUSA) available from http://www.dcusa.co.uk/SitePages/Documents/DCUSA-Document.aspx

http://www.dcusa.co.uk/SitePages/Documents/DCUSA-Document.aspx

10 The Electricity and Gas (Internal Market) Regulations 2011 available from http://www.legislation.gov.uk/uksi/2011/2704/contents/made

- Customer or Supplier of the embedded MPAN(s) connected within the licence exempt distribution network.
- 2.85. We require that gross metered data for the boundary of the connection is provided to us. Until a new industry data flow is introduced for the sending of such gross data, gross metered data shall:
 - be provided in a text file in the format of the D0036 MRA data flow;
 - the text file shall be emailed to Duos.billing@northernpowergrid.com;
 - the title of the email should also contain the phrase "gross data for difference metered private network" and contain the metering reference specified by us in place of the Settlement MPAN.
 - the text filename shall be formed of the metering reference specified by us followed by a hyphen and followed by a timestamp in the format YYYYMMDDHHMMSS and followed by ".txt".
- 2.86. For the avoidance of doubt, the reduced difference metered measurement data for the boundary connection that is to enter Settlement should continue to be sent using the Settlement MPAN.

3. Schedule of charges for use of the Distribution System

- 3.1. Tables listing the charges for use of our Distribution System are published in annexes to this document.
- 3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from:
 - http://www.northernpowergrid.com/document-library/charges
- 3.3. Annex 1 contains charges applied to LV and HV Designated Properties.
- 3.4. Annex 2 contains the charges applied to Designated EHV Properties and charges applied to LDNOs with Designated EHV Properties connected within their embedded Distribution System.
- 3.5. Annex 3 contains details of any preserved and additional charges that are valid at this time. Preserved charges are mapped to an appropriate charge and are closed to new Customers.
- 3.6. Annex 4 contains the charges applied to LDNOs in respect of LV and HV Designated Properties connected in their embedded Distribution System.

4. Schedule of line loss factors

Role of line loss factors in the supply of electricity

- 4.1. Electricity entering or exiting our Distribution System is adjusted to take account of energy that is lost¹¹ as it is distributed through the network. This adjustment does not affect distribution charges but is used in energy settlement to take metered consumption to a notional grid supply point so that Suppliers' purchases take account of the energy lost on the Distribution System.
- 4.2. We are responsible for calculating the Line Loss Factors¹² (LLFs) and providing these to Elexon. Elexon is the company that manages the BSC. The code covers the governance and rules for the balancing and settlement arrangements.
- 4.3. LLFs are used to adjust the Metering System volumes to take account of losses on the Distribution System.

Calculation of line loss factors

- 4.4. LLFs are calculated in accordance with BSC procedure 128. BSCP128 sets out the procedures and principles with which our LLF methodology must comply. It also defines the procedure and timetable by which LLFs are reviewed and submitted.
- 4.5. LLFs are calculated for a set number of time periods during the year, using either a generic method or a site-specific method. The generic method is used for sites connected at LV or HV and the site-specific method is used for sites connected at EHV or where a request for site-specific LLFs has been agreed. Generic LLFs will be applied as a default to all new EHV sites until sufficient data is available for a site-specific calculation.
- 4.6. The definition of EHV used for LLF purposes differs from the definition used for defining Designated EHV Properties in the EDCM. The definition used for LLF purposes can be found in our LLF methodology.
- 4.7. The Elexon website (http://www.elexon.co.uk/reference/technical-operations/losses/) contains more information on LLFs. This page also has links to BSCP 128 and to our LLF methodology.

Publication of Line loss factors

4.8. The LLFs used in Settlement are published on the Elexon portal website, www.elexonportal.co.uk. The website contains the LLFs in standard industry data

¹¹ Energy can be lost for technical and non-technical reasons and losses normally occur by heat dissipation through power flowing in conductors and transformers. Losses can also reduce if a customer's action reduces power flowing in the distribution network. This might happen when a customer generates electricity and the produced energy is consumed locally.

¹² Also referred to as Loss Adjustment Factors.

- formats and in a summary form. A user guide with details on registering and using the portal is also available.
- 4.9. The BSCP128 sets out the timetable by which LLFs are submitted and audited. The submission and audit occurs between September and December in the year prior to the LLFs becoming effective. Only after the completion of the audit at the end of December and BSC approval are the final LLFs published.
- 4.10. Illustrative LLFs based on the latest submitted LLFs are provided in Annex 5 of this statement. These illustrative LLFs are provided with reference to the metered voltage or associated LLFC for generic LLFs and by reference to the LLFCs for site-specific LLFs. Each LLF is applicable to a defined time period.
- 4.11. As this charging statement is published a complete year before the LLFs have been published it is important to note that the LLFs provided in this statement are for illustration only and may be revised during the BSCP128 process.
- 4.12. When using the tables in Annex 5, reference should be made to the LLFC allocated to the MPAN to find the appropriate values.

5. Notes for Designated EHV Properties

EDCM nodal costs

5.1. A table is provided in the accompanying spreadsheet which shows the underlying Long Run Incremental Cost (LRIC) nodal costs used to calculate the current EDCM charges. This spreadsheet is available to download from our website:

http://www.northernpowergrid.com/document-library/charges

5.2. These are illustrative of the modelled costs at the time that this statement was published. A new connection will result in changes to current network utilisations which will then form the basis of future prices. The charge determined in this statement will not necessarily be the charge in subsequent years because of the interaction between new and existing network connections and any other changes made to our Distribution System which may affect charges.

Charges for new Designated EHV Properties

- 5.3. Charges for any new Designated EHV Properties calculated after publication of the current statement will be published on our website in an addendum to that statement as and when necessary. The addendum will include charge information of the type found in Annex 2, and LLFs as found in Annex 5.
- 5.4. The form of the addendum is detailed in Annex 6 of this statement.
- 5.5. The addendum will also be sent to all relevant DCUSA parties (i.e. the registered Supplier) and where requested the Customer.
- 5.6. The new Designated EHV Properties charges will be added to Annex 2 in the next full statement released.

Charges for amended Designated EHV Properties

5.7. Where an existing Designated EHV Property is modified and energised in the charging year, we may revise its EDCM charges for the modified Designated EHV Property. If revised charges are appropriate, an addendum will be sent to all relevant parties and published as a revised 'Schedule of charges and other tables' spreadsheet on our website. The modified Designated EHV property charges will be added to Annex 2 in the next full statement released.

Demand side management

5.8. For those premises where use of system is charged under the EDCM, some customers may be able to benefit from entering into a Demand Side Management (DSM) agreement with us.

- 5.9. DSM arrangements are based on a formal commitment by the customer to materially reduce their MIC in certain time periods, as determined by us, for active network management purposes other than normal planned or unplanned outages.
- 5.10. For new connections the customer must make an express statement in their application that they have an interest in some, or all, of the import capacity for their intended connection or modified connection being interruptible for active network management purposes.
- 5.11. Where the customer enters into a DSM agreement by agreeing to reduce their MIC to meet the defined parameters in the agreement, reduced use of system charges will apply. The chargeable capacity will be equal to the MIC minus the capacity that is subject to restrictions under the DSM agreement. The scale of the reduction will vary by site and is linked to the LRIC element of the charge in line with the approved charging methodology.
- 5.12. Any reduction in use of system charges applicable to the customer will be assessed on a site-specific basis by us. Any customers who wish to enquire whether they can take advantage of DSM should in the first instance contact:

Connection Record Maintenance

Manor House

Station Road

New Penshaw

Houghton-le-Spring

DH4 7LA

e-mail:- connection.records@northernpowergrid.com

6. Electricity distribution rebates

6.1. We have neither given nor announced any DUoS rebates to Users in the 12 months preceding the date of publication of this version of the statement.

7. Accounting and administration services

- 7.1. We reserve the right to impose payment default remedies. The remedies are as set out in DCUSA where applicable or else as detailed in the following paragraph.
- 7.2. If any invoices that are not subject to a valid dispute remain unpaid on the due date, late payment interest (calculated at base rate plus 8%) and administration charges may be imposed.
- 7.3. Our administration charges are detailed in the following table. These charges are set at a level which is in line with the Late Payment of Commercial Debts Act;

Size of Unpaid Debt	Late Payment Fee
Up to £999.99	£40.00
£1,000 to £9,999.99	£70.00
£10,000 or more	£100.00

8. Charges for electrical plant provided ancillary to the grant of Use of System

8.1. Northern Powergrid has no charges applicable to this section.

9. Last Resort Supply Payment - February 2018 Update

- 9.1. In November 2016, GB Energy Supply Limited ceased trading. Ofgem subsequently appointed Co-operative Energy Limited as the Supplier of Last Resort for GB Energy Supply Limited's gas and electricity customers. In taking on GB Energy Supply Limited's customers, Co-operative Energy Limited also took on some liabilities, including any credit balances which customers of GB Energy Supply Limited held at the time of failure.
- 9.2. On 16 November 2017, Ofgem published a minded to decision on Co-operative Energy Limited's request to make a claim for a Last Resort Supply Payment to enable Cooperative Energy Limited to recover costs associated with their appointment as the Supplier of Last Resort, requesting representations from industry on its decision.
- 9.3. On 19 January 2018, Ofgem approved to Co-operative Energy Limited making a claim of £14.0m for a Last Resort Supply Payment¹³. Under the standard conditions of the electricity supply licence (condition 9), the Supplier of Last Resort must make any such claim from gas and electricity distributors. Electricity distribution network operators are collectively liable for 55% of the total claim, and on 25 January 2018, Northern Powergrid (Northeast) Limited received a claim for £0.4m¹⁴.
- 9.4. Under the standard conditions of the electricity distribution licence (condition 38), a distributor receiving a Valid Claim for a Last Resort Supply Payment must increase its UoS charges in the Relevant Regulatory Year (as defined in SLC38), being the next regulatory year if the claim is received more than 60 days prior to the start of that year. As Northern Powergrid (Northeast) Limited received a Valid Claim more than 60 days prior to the start of 2018/19, UoS charges must be increased in 2018/19 to recover the Specified Amount (as defined in SLC38).

¹³ https://www.ofgem.gov.uk/publications-and-updates/last-resort-supplier-payment-claim-co-operative-energy-final-decision

¹⁴ Precisely, £416,797.51

- 9.5. Ofgem has directed that the 15 months' notice required of a change to UoS charges for 2018/19 need not apply in this case, and has directed that distributors are not required to change charges in accordance with the approved charging methodologies, whereby distributors will increase fixed charges for domestic unrestricted, domestic two rate and LV network domestic customers only¹⁵.
- 9.6. The increase in fixed charges for these tariffs has been calculated as follows, rounded to two decimal places:

Supplementary fixed charge
$$(p/day) = \left(\frac{A/B}{C}\right) \times 100$$

Where:

A = Amount to be recovered, being £416,797.51

B = Total combined forecast (from published CDCM model for 2018/19) domestic unrestricted, domestic two rate and LV network domestic customers, being 1,474,465

C = Days in the year, being 365

9.7. The resulting 0.08p/day increase in fixed charge for the aforementioned customers has been applied in this statement, and hence the tariffs published in this statement do not mirror either those originally published in December 2016, nor those in the published CDCM model for 2018/19. All other tariffs remain unaltered from the original December 2016 publication.

NORTHERN POWERGRID (NORTHEAST) LTD

¹⁵ https://www.ofgem.gov.uk/publications-and-updates/decision-grant-all-dnos-derogations-charging-years-201819-and-201920-due-last-resort-supply-payment-claim

Appendix 1 - Glossary of Terms

The following definitions, which can extend to grammatical variations and cognate 1.1. expressions, are included to aid understanding:

Term	Definition
All-the-way charge	A charge that is applicable to an end user rather than an LDNO. An end user in this context is a Supplier/User who has a registered MPAN or MSID and is using the Distribution System to transport energy on behalf of a Customer.
Balancing and Settlement Code (BSC)	The BSC contains the governance arrangements for electricity balancing and settlement in Great Britain. An overview document is available from: www.elexon.co.uk/ELEXON Documents/trading_arrangements.pdf.
Common Distribution Charging Methodology (CDCM)	The CDCM used for calculating charges to Designated Properties as required by standard licence condition 13A of the electricity distribution licence.
Connection Agreement	An agreement between an LDNO and a Customer which provides that that Customer has the right for its connected installation to be and remain directly or indirectly connected to that LDNO's Distribution System
Central Volume Allocation (CVA)	As defined in the BSC.
	A person to whom a User proposes to supply, or for the time being supplies, electricity through an exit point, or from who, a user or any relevant exempt supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied though an exit point;
Customer	Or
	A person from whom a User purchases, or proposes to purchase, electricity, at an entry point (who may from time to time be supplied with electricity as a customer of that user (or another electricity supplier) through an exit point).
Designated EHV Properties	As defined in standard condition 13A of the electricity distribution licence.
Designated Properties	As defined in standard condition 13A of the electricity distribution licence.
Distribution Connection and Use of System Agreement (DCUSA)	The DCUSA is a multi-party contract between the licensed electricity distributors, suppliers, generators and Offshore Transmission Owners (OFTOs) of Great Britain. It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.

Term	Definition		
	These are unique IDs that can be used, with reference to the MPAN, to identify your LDNO. The charges for other network operators can be found on their website.		
	ID	Distribution Service Area	Company
	10	East of England	UK Power Networks
	11	East Midlands	Western Power Distribution
	12	London	UK Power Networks
	13	Merseyside and North Wales	Scottish Power
	14	Midlands	Western Power Distribution
	15	Northern	Northern Powergrid
	16	North Western	Electricity North West
	17	Scottish Hydro Electric (and embedded networks in other areas)	Scottish Hydro Electric Power Distribution plc
Distributor IDs	18	South Scotland	Scottish Power
	19	South East England	UK Power Networks
	20	Southern Electric (and embedded networks in other areas)	Southern Electric Power Distribution plc
	21	South Wales	Western Power Distribution
	22	South Western	Western Power Distribution
	23	Yorkshire	Northern Powergrid
	24	All	Independent Power Networks
	25	All	ESP Electricity
	26	All	Energetics Electricity Ltd
	27	All	The Electricity Network Company Ltd
	29	All	Harlaxton Energy Networks
	30	All	Peel Electricity Networks Ltd
	31	All	UK Power Distribution Ltd
Distribution Network Operator (DNO)	An electricity distributor who operates one of the 14 distribution services areas and in whose electricity distribution licence the requirements of Section B of the standard conditions of that licence have effect.		
Distribution Services Area	The area specified by the Gas and Electricity Markets Authority within which each DNO must provide specified distribution services.		

Term	Definition
	The system consisting (wholly or mainly) of electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from: • Grid Supply Points or generation sets or other entry points
	to the points of delivery to:
Distribution System	 Customers or Users or any transmission licensee in its capacity as operator of that licensee's transmission system or the Great Britain (GB) transmission system and includes any remote transmission assets (owned by a transmission licensee within England and Wales)
	that are operated by that authorised distributor and any electrical plant, electricity meters, and metering equipment owned or operated by it in connection with the distribution of electricity, but does not include any part of the GB transmission system.
EHV Distribution Charging Methodology (EDCM)	The EDCM used for calculating charges to Designated EHV Properties as required by standard licence condition 13B of the Electricity Distribution Licence.
Electricity Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Electricity Act 1989.
Electricity Distributor	Any person who is authorised by an Electricity Distribution Licence to distribute electricity.
Embedded LDNO	This refers to an LDNO operating a Distribution System which is embedded within another Distribution System.
Embedded network	An electricity Distribution System operated by an LDNO and embedded within another Distribution System.
Engineering Recommendation P2/6	A document of the Energy Networks Association, which defines planning standards for security of supply and is referred to in Standard Licence Condition 24 of our Electricity Distribution Licence.
Entry Point	A boundary point at which electricity is exported onto a Distribution System from a connected installation or from another Distribution System, not forming part of the total system (boundary point and total system having the meaning given to those terms in the BSC).
Exit Point	A point of connection at which a supply of electricity may flow from the Distribution System to the Customer's installation or User's installation or the Distribution System of another person.
Extra-High Voltage (EHV)	Nominal voltages of 22kV and above.
Gas and Electricity Markets Authority (GEMA)	As established by the Utilities Act 2000.

Term	Definition
Grid Supply Point (GSP)	A metered connection between the National Grid Electricity Transmission (NGET) system and the licensee's Distribution System at which electricity flows to or from the Distribution System.
GSP Group	A distinct electrical system that is supplied from one or more GSPs for which total supply into the GSP group can be determined for each half hour.
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV.
Intermittent Generation	Defined in DCUSA Schedule 16 as a generation plant where the energy source of the prime mover cannot be made available on demand, in accordance to the definitions in Engineering Recommendation P2/6. These include wind, tidal, wave, photovoltaic and small hydro.
Invalid Settlement Combination	A settlement combination that is not recognised as a valid combination in market domain data - see https://www.elexonportal.co.uk/MDDVIEWER .
kVA	Kilovolt ampere.
kVArh	Kilovolt ampere reactive hour.
kW	Kilowatt.
kWh	Kilowatt hour (equivalent to one "unit" of electricity).
Licensed Distribution Network operator (LDNO)	The holder of a licence in respect of electricity distribution activities in Great Britain.
Line Loss Factor (LLF)	The factor that is used in Settlement to adjust the metering system volumes to take account of losses on the distribution system.
Line Loss Factor Class (LLFC)	An identifier assigned to an SVA metering system which is used to assign the LLF and use of system charges.
Load Factor	annual consumption (kWh) maximum demand $(kW) \times hours$ in year
Low Voltage (LV)	Nominal voltages below 1kV.
Market Domain Data (MDD)	MDD is a central repository of reference data used by all Users involved in Settlement. It is essential to the operation of SVA trading arrangements.
Maximum Export Capacity (MEC)	The MEC of apparent power expressed in kVA that has been agreed can flow through the entry point to the Distribution System from the Customer's installation as specified in the connection agreement.

Term	Definition
Maximum Import Capacity (MIC)	The MIC of apparent power expressed in kVA that has been agreed can flow through the exit point from the Distribution System to the Customer's installation as specified in the connection agreement.
Measurement Class	 A classification of metering systems used in the BSC which indicates how consumption is measured, i.e.: Measurement class A - non-half-hourly metering equipment; Measurement class B - non-half-hourly unmetered supplies; Measurement class C - half-hourly metering equipment at or above 100kW premises; Measurement class D - half-hourly unmetered supplies; Measurement class E - half-hourly metering equipment below 100kW premises with CT metering; Measurement class F - half hourly metering equipment at below 100kW premises CT or whole current metering, and at domestic premises; and Measurement class G - half hourly metering equipment at below 100kW premises with whole current metering and not at domestic premises.
Meter Timeswitch Code (MTC)	MTCs are three digit codes allowing suppliers to identify the metering installed in Customers' premises. They indicate whether the meter is single or multi-rate, pre-payment or credit, or whether it is 'related' to another meter. Further information can be found in MDD.
Metering Point	The point at which electricity that is exported to or imported from the licensee's Distribution System is measured, is deemed to be measured, or is intended to be measured and which is registered pursuant to the provisions of the MRA. For the purposes of this statement, GSPs are not 'metering points'.
Meter Point Administration Data (MPAD)	The unique reference relating to the metering point under the MRA.
Metering Point Administration Number (MPAN)	A number (forming part of the MPAD) relating to a Metering Point under the MRA.
Metering System	Particular commissioned metering equipment installed for the purposes of measuring the quantities of exports and/or imports at the exit point or entry point.
Metering System Identifier (MSID)	MSID is a term used throughout the BSC and its subsidiary documents and has the same meaning as MPAN as used under the MRA.

Term	Definition
Master Registration Agreement (MRA)	The MRA is an Agreement that sets out terms for the provision of Metering Point Administration Services (MPAS), Registrations, and procedures in relation to the Change of Supplier to any premises/metering point.
Non-Intermittent Generation	Defined in DCUSA Schedule 16 as a generation plant where the energy source of the prime mover can be made available on demand, in accordance to the definitions in Engineering Recommendation P2/6. The generator can choose when to operate, and bring more benefits to the network if it runs at times of high load. These include combined cycle gas turbine (CCGT), gas generators, landfill, sewage, biomass, biogas, energy crop, waste incineration and combined heat and power (CHP).
Nested Networks	This refers to a situation where there is more than one level of Embedded Network and therefore nested Distribution Systems between LDNOs (e.g. host DNO→primary nested DNO→ secondary nested DNO→customer).
Ofgem	Office of Gas and Electricity Markets - Ofgem is governed by GEMA and is responsible for the regulation of the distribution companies.
Profile Class (PC)	A categorisation applied to NHH MPANs and used in settlement to group customers with similar consumption patterns to enable the calculation of consumption profiles.
Settlement	The determination and settlement of amounts payable in respect of charges (including reconciling charges) in accordance with the BSC.
Settlement Class (SC)	The combination of Profile Class, Line Loss Factor Class, Time Pattern Regime and Standard Settlement Configuration, by Supplier within a GSP group and used for Settlement.
Standard Settlement Configuration (SSC)	A standard metering configuration relating to a specific combination of Time Pattern Regimes.
Supercustomer	The method of billing Users for use of system on an aggregated basis, grouping together consumption and standing charges for all similar NHH metered Customers or aggregated HH metered Customers.
Supercustomer DUoS Report	A report of profiled data by Settlement Class providing counts of MPANs and units consumed.
Supplier	An organisation with a supply license for electricity supplied to and/or exported from a metering point.
Supplier Volume Allocation (SVA)	As defined in the BSC.

Term	Definition	
Time Pattern Regime (TPR)	The pattern of switching behaviour through time that one or more meter registers follow.	
Unmetered Supplies	Exit points deemed to be suitable as unmetered supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001 and where operated in accordance with BSC procedure 520 ¹⁶ .	
Use of System Charges	Charges which are applicable to those parties which use the Distribution Network.	
User	Someone that has a use of system agreement with the DNO e.g. a supplier, generator or other LDNO.	

¹⁶ Balancing and Settlement Code Procedures are available from http://www.elexon.co.uk/pages/bscps.aspx

Appendix 2 - Guidance notes¹⁷

Background

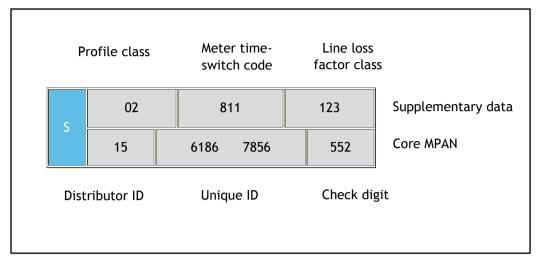
- 1.1. The electricity bill from your Supplier contains an element of charge to cover electricity distribution costs. This distribution charge covers the cost of operating and maintaining a safe and reliable Distribution System that forms the 'wires' that transport electricity between the national transmission system and end users such as homes and businesses. Our Distribution System includes overhead lines, underground cables, as well as substations and transformers.
- 1.2. In most cases, your Supplier is invoiced for the distribution charge and this is normally part of your total bill. In some cases, for example business users, the Supplier may pass through the distribution charge as an identifiable line item on the electricity bill.
- 1.3. Where electricity is generated at a property your Supplier may receive a credit for energy that is exported on to the Distribution System. These credits are intended to reflect that the exported generation may reduce the need for traditional demand led reinforcement of the Distribution System.
- 1.4. Understanding your distribution charges could help you reduce your costs and increase your credits. This is achieved by understanding the components of the charge to help you identify whether there may be opportunities to change the way you use the Distribution System.

Meter point administration

- 1.5. We are responsible for managing the electricity supply points that are connected to our Distribution System. Typically every supply point is identified by a Meter Point Administration Number (MPAN). A few supply points may have more than one MPAN depending on the metering configuration (e.g. a school which may have an MPAN for the main supply and an MPAN for catering).
- 1.6. The MPAN is a 13 digit number and forms part of the 21 digit MPAD, preceded by an 'S'. The MPAD applicable to a supply point is found on the electricity bill from your Supplier. This number enables you to establish who your electricity distributor is, details of the characteristics of the supply and importantly the distribution charges that are applicable to your premises.
- 1.7. The 21-digit number is normally presented in two sections as shown in the following diagram. The top section is supplementary data which gives information about the characteristics of supply, while the bottom 'core' is the unique identifier.

¹⁷ These guidance notes are provided for additional information and do not form part of the application of charges.

Full MPAD diagram example



- 1.8. Generally, you will only need to know the Distributor ID and line loss factor class to identify the distribution charges for your premises. However, there are some premises where charges are specific to that site. In these instances the charges are identified by the core MPAN. The Distributor ID for Northern Powergrid Northeast is 15. Other Distributor IDs can be referenced in the glossary.
- 1.9. Additionally it can be useful to understand the profile class provided in the supplementary data. The profile class will be a number between 00 and 08. The following list provides details of the allocation of profile classes to types of customers:
 - '01' Domestic customers with unrestricted supply
 - '02' Domestic customers with restricted load, for example off-peak heating
 - '03' Non-domestic customers with unrestricted supply
 - '04' Non-domestic customers with restricted load, for example off-peak heating
 - '05' Non-domestic maximum demand customers with a Load Factor of less than 20%
 - '06' Non-domestic maximum demand customers with a Load Factor between 20% and 30%
 - '07' Non-domestic maximum demand customers with a Load Factor between 30% and 40%
 - '08' Non-domestic maximum demand customers with a Load Factor over 40% or non-half-hourly metered generation customers
 - '00' Half-hourly metered demand and generation customers
- 1.10. Unmetered Supplies will be allocated to profile class 01, 08 and 00 depending on the type of load or the measurement method of the load.

1.11. The allocation of the profile class will affect your charges. If you feel that you have been allocated the wrong profile class, please contact your Supplier as they are responsible for this.

Your charges

- 1.12. All distribution charges that relate to our Distributor ID 15 are provided in this statement.
- You can identify your charges by referencing your line loss factor class, from Annex 1.
 If the MPAN is for a Designated EHV Property then the charges will be found in Annex
 In a few instances, the charges may be contained in Annex 3. When identifying charges in Annex 2, please note that some line loss factor classes have more than one charge. In this instance you will need to select the correct charge by cross referencing with the core MPAN provided in the table.
- 1.14. Once you have identified which charge structure applies to your MPAN then you will be able to calculate an estimate of your distribution charge using the calculator provided in the spreadsheet 'Schedule of charges and other tables' found in the sheet called 'Charge Calculator'. This spreadsheet can be downloaded from our website http://www.northernpowergrid.com/document-library/charges.

Reducing your charges

- 1.15. The most effective way to reduce your energy charges is to reduce your consumption by switching off or using more energy efficient appliances. However, there are also other potential opportunities to reduce your distribution charges; for example, it may be beneficial to shift demand or generation to a better time period. Demand use is likely to be cheaper outside the peak periods and generation credits more beneficial, although the ability to directly benefit will be linked to the structure of your supply charges.
- 1.16. The calculator mentioned above provides the opportunity to establish a forecast of the change in distribution charges that could be achieved if you are able to change any of the consumption related inputs.

Reactive power and reactive power charges

- 1.17. Reactive power is a separately charged component of connections that are half-hourly metered. Reactive power charges are generally avoidable if 'best practice' design of the properties' electrical installation has been provided in order to maintain a power factor between 0.95 and unity at the Metering Point.
- 1.18. Reactive Power (kVArh) is the difference between working power (active power measured in kW) and total power consumed (apparent power measured in kVA).

- Essentially it is a measure of how efficiently electrical power is transported through an electrical installation or a Distribution System.
- 1.19. Power flowing with a power factor of unity results in the most efficient loading of the Distribution System. Power flowing with a power factor of less than 0.95 results in much higher losses in the Distribution System, a need to potentially provide higher capacity electrical equipment and consequently a higher bill for you the consumer. A comparatively small improvement in power factor can bring about a significant reduction in losses since losses are proportional to the square of the current.
- 1.20. Different types of electrical equipment require some 'reactive power' in addition to 'active power' in order to work effectively. Electric motors, transformers and fluorescent lighting, for example, may produce poor power factors due to the nature of their inductive load. However, if good design practice is applied then the poor power factor of appliances can be corrected as near as possible to source. Alternatively, poor power factor can be corrected centrally near to the meter.
- 1.21. There are many advantages that can be achieved by correcting poor power factor. These include: reduced energy bills through lower reactive charges, lower capacity charges and reduced power consumption and reduced voltage drop in long cable runs.

Site-specific EDCM charges

- 1.22. A site classified as a Designated EHV Property is subject to a locational based charging methodology (referred to as EDCM) for higher voltage network users. Distributors use two approved approaches: Long Run Incremental Cost (LRIC) and Forward Cost Pricing (FCP) and we use the LRIC methodology. The EDCM will apply to Customers connected at Extra-High Voltage or connected at High Voltage and metered at a high voltage substation.
- 1.23. EDCM charges and credits are site-specific, reflecting the degree to which the local and higher voltage networks have the capacity to serve more demand or generation without the need to upgrade the electricity infrastructure. The charges also reflect the networks specifically used to deliver the electricity to the site as well as the usage at the site. Generators with non-intermittent output and deemed to be providing beneficial support to our networks may qualify to receive credit.
- 1.24. The charges under the EDCM comprise of the following individual components:
 - a) Fixed charge This charge recovers operational costs associated with those connection assets that are provided for the 'sole' use of the customer. The value of these assets is used as a basis to derive the charge.
 - b) Capacity charge (pence/kVA/day) This charge comprises the relevant LRIC component, the National Grid Electricity Transmission cost and other regulated costs.

Capacity charges are levied on the MIC, MEC, and any exceeded capacity. You may wish to review your MIC or MEC periodically to ensure it remains appropriate for your needs as you may be paying for more capacity than you require. If you wish to make changes contact us via the details in section 1.

The LRIC cost is locational and reflects our assessment of future network reinforcement necessary at the voltage of connection (local) and beyond at all higher voltages (remote) relevant to the customer's connection. This results in the allocation of higher costs in more capacity congested parts of the network reflecting the greater likelihood of future reinforcement in these areas, and the allocation of lower costs in less congested parts of the network. The local LRIC cost is included in the capacity charge.

Our regulated costs include direct and indirect operational costs and a residual amount to ensure recovery of our regulated allowed revenue. The capacity charge recovers these costs using the customer usage profile and the relevant assets being used to transport electricity between the source substation and customer's Metering Point.

- c) Super-red unit charge (pence/kWh) This charge recovers the remote LRIC component. The charge is positive for import and negative for export which means you can either reduce your charges by minimising consumption or increasing export at those times. The charge is applied to consumption during the Super-red time period as detailed in Annex 2.
- 1.25. Future charge rates may be affected by consumption during the Super-red period.

 Therefore reducing consumption in the Super-red time period may be beneficial.
- 1.26. Reactive Power The EDCM does not include a separate charge component for any reactive power flows (kVAr) for either demand or generation. However, the EDCM charges do reflect the effect on the network of the customer's power factor, for example unit charges can increase if your site power factor is poor (lower than 0.95). Improving your site's power factor will also reduce the maximum demand (kVA) for the same power consumed in kW thus providing scope to reduce your agreed capacity requirements.

Annex 1 - Schedule of Charges for use of the Distribution System by LV and HV Designated Properties

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final LV and HV charges

Time Bands for Half Hourly Metered Properties											
Time periods	Red Time Band	Red Time Band Amber Time Band									
Monday to Friday (Including Bank Holidays) All Year	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00								
Saturday and Sunday All Year			00:00 to 24:00								
Notes	All the above times a	All the above times are in UK Clock time									

Time Bands for Half Hourly Unmetered Properties											
Black Time Band Yellow Time Band Green Time Band											
Monday to Friday (Including Bank Holidays) November to February Inclusive	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00								
Monday to Friday (Including Bank Holidays) April to October Inclusive and March		08:00 to 22:00	00:00 to 08:00 22:00 to 24:00								
Saturday and Sunday All year			00:00 to 24:00								
Notes	All the above times a	re in UK Clock time									

Tariff name	Open LLFCs	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh	Closed LLFCs
Domestic Unrestricted *	1	1	2.202			5.38				998, 999
Domestic Two Rate *	2	2	2.526	0.968		5.38				
Domestic Off Peak (related MPAN)	12	2	1.099							
Small Non Domestic Unrestricted	203	3	2.162			5.71				
Small Non Domestic Two Rate	204	4	2.373	1.001		5.71				
Small Non Domestic Off Peak (related MPAN)	205	4	1.095							
LV Medium Non-Domestic	257	5-8	2.172	0.961		28.44				
LV Sub Medium Non-Domestic	265	5-8	2.250	0.994		35.24				
HV Medium Non-Domestic	304	5-8	1.510	0.941		268.98				
LV Network Domestic *	249	0	7.287	1.817	0.955	5.38				
LV Network Non-Domestic Non-CT	278	0	7.282	1.818	0.956	5.71				
LV HH Metered	251	0	5.563	1.565	0.940	13.06	2.10	4.87	0.168	
LV Sub HH Metered	293	0	4.161	1.358	0.927	13.36	2.62	4.49	0.104	
HV HH Metered	301	0	3.081	1.200	0.917	140.33	2.40	4.21	0.068	
NHH UMS category A	506	8	1.877							
NHH UMS category B	507	1	2.176							
NHH UMS category C	508	1	3.254							
NHH UMS category D	509	1	1.679							
LV UMS (Pseudo HH Metered)	554 & 555	0	18.807	1.768	0.955					
LV Generation NHH or Aggregate HH	774	8&0	(0.702)							
LV Sub Generation NHH	776	8	(0.593)							
LV Generation Intermittent	792	0	(0.702)						0.145	
LV Generation Intermittent no RP charge	392	0	(0.702)							
LV Generation Non-Intermittent	794	0	(4.547)	(0.656)	(0.043)				0.145	
LV Generation Non-Intermittent no RP charge	394	0	(4.547)	(0.656)	(0.043)					
LV Sub Generation Intermittent	793	0	(0.593)						0.136	
LV Sub Generation Intermittent no RP charge	393	0	(0.593)							
LV Sub Generation Non-Intermittent	795	0	(3.850)	(0.553)	(0.036)				0.136	
LV Sub Generation Non-Intermittent no RP charge	395	0	(3.850)	(0.553)	(0.036)					
HV Generation Intermittent	796	0	(0.395)			61.03			0.102	
HV Generation Intermittent no RP charge	396	0	(0.395)			61.03				
HV Generation Non-Intermittent	798	0	(2.576)	(0.364)	(0.025)	61.03			0.102	
HV Generation Non-Intermittent no RP charge	398	0	(2.576)	(0.364)	(0.025)	61.03				

^{*}The fixed charges for these tariffs are inclusive of the Ofgem approved adjustment (0.08p/day) to recover Co-operative Energy Limited's last resort supply payment claim: https://www.ofgem.gov.uk/publications-and-updates/decision-grant-all-dnos-derogations-charging-years-201819-and-201920-due-last-resort-supply-payment-claim

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final EDCM charges

Time Periods for Designated EHV Properties									
Time periods	Super Red Time Band								
Monday to Friday (Including Bank Holidays) November to February Inclusive	1600 - 1930								
Notes	All the above times are in UK Clock time								

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	601	1592001005770 1592101005776		701	1574000216135 1594001005774	EHV Site Specific - Generation Exempt (LLFC 601 & 701)		720.44	0.97	0.97				
	603	1592001051182				EHV Site Specific (LLFC 603)		8,037.89	1.74	1.74				
	604	MSID_7299		727	MSID_7300	EHV Site Specific (LLFC 604 & 727)		53.04	0.70	0.70		1,060.76	0.05	0.05
	605	1592001092676				EHV Site Specific (LLFC 605)	0.268	1,972.11	1.97	1.97				
	606	1592001092719				EHV Site Specific (LLFC 606)	0.440	3,944.22	2.30	2.30				
	607	1592001092728				EHV Site Specific (LLFC 607)	0.746	3,944.22	3.09	3.09				
	608	1592001092737				EHV Site Specific (LLFC 608)	0.396	3,944.22	1.76	1.76				
	609	1592001046085				EHV Site Specific (LLFC 609)		706.51	2.87	2.87				
	611	1592001111628				EHV Site Specific (LLFC 611)		3,479.52	6.23	6.23				
	612	1592001073112		704	1594001073116	EHV Site Specific (LLFC 612 & 704)	0.276	186.42	1.05	1.05	(0.347)	1,864.20	0.05	0.05
	613	1592001116013				EHV Site Specific (LLFC 613)	0.620	65.59	1.10	1.10		,		
	614	1592001055257		709	1594001055250	EHV Site Specific - Generation Exempt (LLFC 614 & 709)		3,618.86	0.61	0.61				
	615 &	1592001055239			1001001000200									
	616	1592001055248				EHV Site Specific (LLFC 615 & 616)	0.439	3,311.49	2.48	2.48				
	617	1592001110572				EHV Site Specific (LLFC 617)		9,300.99	1.67	1.67				
	618	1592001094308				EHV Site Specific (LLFC 618)	0.290	3,328.75	4.87	4.87				
	619	1570000150382		710	1594000000038	EHV Site Specific - Generation Exempt (LLFC 619 & 710)	0.016	24.13	1.24	1,24				
	620	1592001007476		7.10	100400000000	EHV Site Specific (LLFC 620)	0.010	1,413,02	4.68	4.68				
	621	1592001007470				EHV Site Specific (LLFC 621)	0.114	65.59	2.05	2.05				
	622	1592001007494		711	1594001036578	EHV Site Specific (EEI C 621) EHV Site Specific - Generation Exempt (LLFC 622 & 711)	0.166	467.15	1.46	1.46				
	624	1592001030574		804	1574000324772	EHV Site Specific (LLFC 624 & 804)	0.013	3,037.92	2.23	2.23		950.71	0.05	0.05
	625	1592001063540		748	1594001006893	EHV Site Specific (LLFC 624 & 604) EHV Site Specific - Generation Exempt (LLFC 625 & 748)	0.750	25.55	2.35	2.35		930.71	0.05	0.05
	627	1570000199077		748	1574000100693	EHV Site Specific - Generation Exempt (LLFC 625 & 748)	0.750	1,109.22	1.41	1.41				
				729	1574000199083		0.417	3,119.50	3.35	3.35				
	626 628	1592001005637				EHV Site Specific (LLFC 626)	0.417	599.17	3.78	3.78				
		1592001111405				EHV Site Specific (LLFC 628)	0.956	65.59	3.76	3.25				
	631	1592001110216				EHV Site Specific (LLFC 631)	0.001		3.77	3.77				
	632	1592001007467				EHV Site Specific (LLFC 632)	0.276	255.43	3.77	3.11				
	633	1580001273940 1580001273950				EHV Site Specific (LLFC 633)	0.609	3,425.20	3.05	3.05				
	637	1592001141543		728	1594001141547	EHV Site Specific - Generation Exempt (LLFC 637 & 728)	0.043	1,301.87	1.42	1.42				
	680	1580000675845		759	1574000275033	EHV Site Specific (LLFC 680 & 759)	1.340	2.95	1.62	1.62		124.76	0.05	0.05
	681	1580000872387		760	1574000283735	EHV Site Specific (LLFC 681 & 760)	0.177	107.22	1.14	1.14		4,288.82	0.05	0.05
	544	1570000124531		761	1594000000047	EHV Site Specific - Generation Exempt (LLFC 544 & 761)		11.33	0.79	0.79				
	682	1580000909309		762	1574000285644	EHV Site Specific (LLFC 682 & 762)	0.277	811.07	0.79	0.79	(0.347)	4,424.01	0.05	0.05
	691	1592101007746				EHV Site Specific (LLFC 691)	0.056	32.80	3.60	3.60				
	683	1570000166434		763	1594000000029	EHV Site Specific - Generation Exempt (LLFC 683 & 763)		6.46	0.96	0.96				
	692	1580000867554 1580000911799				EHV Site Specific (LLFC 692)	2.329	65.59	2.51	2.51				
	693	1592001074941				EHV Site Specific (LLFC 693)	1.074	32.80	3.42	3.42				
	694	1570000190631				EHV Site Specific (LLFC 694)	1.102	65.59	4.77	4.77				
	695	1580000918163				EHV Site Specific (LLFC 695)	0.047	65.59	2.60	2.60				
		1580000918172				the state of the s								
	684	1580001085400		764	1574000298500	EHV Site Specific (LLFC 684 & 764)	0.007	588.30	1.19	1.19	(0.161)	3,922.48	0.05	0.05
	685	1580001132432		765	1574000302403	EHV Site Specific (LLFC 685 & 765)		31.78	0.72	0.72		870.78	0.05	0.05
	686	1580001150566 1580001150575		766	1574000303940 1574000303959	EHV Site Specific (LLFC 686 & 766)		311.29	0.47	0.47		19,324.06	0.05	0.05
	687	TBC				EHV Site Specific (LLFC 687)		1,343.20	1.34	1.34				
	688	1580001208659		767	1574000309384	EHV Site Specific (LLFC 688 & 767)	0.662	17.55	3.18	3.18		2,000.28	0.05	0.05
	689	1580001208668		768	1574000309375	EHV Site Specific (LLFC 689 & 768)	0.662	91.08	2.98	2.98		3,931.05	0.05	0.05
	690	1580001174414		782	1574000306374	EHV Site Specific (LLFC 690 & 782)	0.332	36.65	2.98	2.98		1,319.30	0.05	0.05
	540	1580001190763		783	1574000307917	EHV Site Specific (LLFC 540 & 783)	0.001	2.12	1.00	1.00	(0.037)	509.42	0.05	0.05
	541	1580001197945		784	1574000308405	EHV Site Specific (LLFC 541 & 784)	0.276	318.34	0.78	0.78	(0.347)	4,703.70	0.05	0.05
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Annex 2 - Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users)

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	(p/kVA/day)	Export Super Red unit charge (p/kWh)	(p/day)	Export capacity charge (p/kVA/day)	(p/kVA/day)
	542	1580001278406		785	1574000315040	EHV Site Specific (LLFC 542 & 785)		169.66	0.68	0.68		313.87	0.05	0.05
	543	1580001278415				EHV Site Specific (LLFC 543)		4,035.65	1.13	1.13				
	545	1580001417656				EHV Site Specific (LLFC 545)	0.134	17,351.76	2.32	2.32				
	547	1580001440530		787	1574000324470	EHV Site Specific (LLFC 547 & 787)	0.447	32.56	2.28	2.28		2,248.31	0.05	0.05
	548	1580001440520		788	1574000324461	EHV Site Specific (LLFC 548 & 788)	0.447	64.36	2.28	2.28		5,570.24	0.05	0.05
	549	1580001487955		789	1574000327286	EHV Site Specific (LLFC 549 & 789)		257.72	2.00	2.00		18,212.03	0.05	0.05
	560	TBC		806	TBC	EHV Site Specific (LLFC 560 & 806)		25.82	1.83	1.83		2,715.36	0.05	0.05
	561	TBC		807	TBC	EHV Site Specific (LLFC 561 & 807)		51.15	1.64	1.64		8,866.05	0.05	0.05
	563	1580001448895		802	1574000324790	EHV Site Specific (LLFC 563 & 802)	0.740	1.33	2.84	2.84		126.38	0.05	0.05
	562	1580001448900		769	1574000324781	EHV Site Specific (LLFC 562 & 769)	0.740	1.33	2.84	2.84		126.38	0.05	0.05
	564	TBC		803	TBC	EHV Site Specific (LLFC 564 & 803)		247.28	1.83	1.83		247.28	0.05	0.05
	565	1580001498380		805	1574000327505	EHV Site Specific (LLFC 565 & 805)	1.231	129.98	2.45	2.45	(1.436)	509.00	0.05	0.05

Annex 2a - Schedule of Import Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users)

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final EDCM import charges

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
	601	1592001005770 1592101005776	EHV Site Specific - Generation Exempt (LLFC 601 & 701)		720.44	0.97	0.97
	603		EHV Site Specific (LLFC 603)		8,037.89	1.74	1.74
	604	MSID_7299	EHV Site Specific (LLFC 604 & 727)		53.04	0.70	0.70
	605		EHV Site Specific (LLFC 605)	0.268	1,972.11	1.97	1.97
	606		EHV Site Specific (LLFC 606)	0.440	3,944.22	2.30	2.30
	607 608		EHV Site Specific (LLFC 607) EHV Site Specific (LLFC 608)	0.746 0.396	3,944.22 3,944.22	3.09 1.76	3.09 1.76
	609		EHV Site Specific (LLFC 609)	0.550	706.51	2.87	2.87
	611	1592001111628	EHV Site Specific (LLFC 611)		3,479.52	6.23	6.23
	612		EHV Site Specific (LLFC 612 & 704)	0.276	186.42	1.05	1.05
	613	1592001116013	EHV Site Specific (LLFC 613)	0.620	65.59	1.10	1.10
	614 615 &	1592001055257 1592001055239	EHV Site Specific - Generation Exempt (LLFC 614 & 709)		3,618.86	0.61	0.61
	616	1592001055248	EHV Site Specific (LLFC 615 & 616)	0.439	3,311.49	2.48	2.48
	617	1592001110572	EHV Site Specific (LLFC 617)		9,300.99	1.67	1.67
	618		EHV Site Specific (LLFC 618)	0.290	3,328.75	4.87	4.87
	619	1570000150382	EHV Site Specific - Generation Exempt (LLFC 619 & 710)	0.016	24.13	1.24	1.24
	620 621		EHV Site Specific (LLFC 620) EHV Site Specific (LLFC 621)	0.114	1,413.02 65.59	4.68 2.05	4.68 2.05
	622		EHV Site Specific - Generation Exempt (LLFC 622 & 711)	0.114	467.15	1.46	1.46
	624	1592001063540	EHV Site Specific (LLFC 624 & 804)	0.013	3,037.92	2.23	2.23
	625	1592001006890	EHV Site Specific - Generation Exempt (LLFC 625 & 748)	0.750	25.55	2.35	2.35
	627		EHV Site Specific - Generation Exempt (LLFC 627 & 729)		1,109.22	1.41	1.41
	626		EHV Site Specific (LLFC 626) EHV Site Specific (LLFC 628)	0.417 0.958	3,119.50	3.35	3.35
	628 631		EHV Site Specific (LLFC 631)	0.958	599.17 65.59	3.78 3.25	3.78 3.25
	632		EHV Site Specific (LLFC 632)	0.278	255.43	3.77	3.77
	633	1580001273940 1580001273950	EHV Site Specific (LLFC 633)	0.609	3,425.20	3.05	3.05
	637	1592001141543	EHV Site Specific - Generation Exempt (LLFC 637 & 728)	0.043	1,301.87	1.42	1.42
	680 681		EHV Site Specific (LLFC 680 & 759) EHV Site Specific (LLFC 681 & 760)	1.340 0.177	2.95 107.22	1.62 1.14	1.62 1.14
	544	1570000124531	EHV Site Specific (EEI C 661 & 760) EHV Site Specific - Generation Exempt (LLFC 544 & 761)	0.177	11.33	0.79	0.79
	682	1580000909309	EHV Site Specific (LLFC 682 & 762)	0.277	811.07	0.79	0.79
	691		EHV Site Specific (LLFC 691)	0.056	32.80	3.60	3.60
	683 692	1570000166434 1580000867554 1580000911799	EHV Site Specific - Generation Exempt (LLFC 683 & 763) EHV Site Specific (LLFC 692)	2.329	6.46 65.59	0.96 2.51	0.96 2.51
	693	1592001074941	EHV Site Specific (LLFC 693)	1.074	32.80	3.42	3.42
	694	1570000190631	EHV Site Specific (LLFC 694)	1.102	65.59	4.77	4.77
	695	1580000918163 1580000918172	EHV Site Specific (LLFC 695)	0.047	65.59	2.60	2.60
	684		EHV Site Specific (LLFC 684 & 764)	0.007	588.30	1.19	1.19
	685 686	1580001132432 1580001150566 1580001150575	EHV Site Specific (LLFC 685 & 765) EHV Site Specific (LLFC 686 & 766)		31.78 311.29	0.72 0.47	0.72 0.47
	687	TBC	EHV Site Specific (LLFC 687)		1,343.20	1.34	1.34
	688	1580001208659	EHV Site Specific (LLFC 688 & 767)	0.662	17.55	3.18	3.18
	689	1580001208668		0.662	91.08	2.98	2.98
	690		EHV Site Specific (LLFC 690 & 782) EHV Site Specific (LLFC 540 & 783)	0.332	36.65	2.98 1.00	2.98
	540 541		EHV Site Specific (LLFC 540 & 783) EHV Site Specific (LLFC 541 & 784)	0.001 0.276	2.12 318.34	1.00 0.78	1.00 0.78
	542		EHV Site Specific (LLFC 542 & 785)	0.210	169.66	0.68	0.68
	543	1580001278415	EHV Site Specific (LLFC 543)		4,035.65	1.13	1.13
	545		EHV Site Specific (LLFC 545)	0.134	17,351.76	2.32	2.32
	547 548		EHV Site Specific (LLFC 547 & 787) EHV Site Specific (LLFC 548 & 788)	0.447 0.447	32.56 64.36	2.28 2.28	2.28 2.28
	549		EHV Site Specific (LLFC 548 & 789)	0.447	257.72	2.28	2.28
	560	TBC	EHV Site Specific (LLFC 560 & 806)		25.82	1.83	1.83
	561	TBC	EHV Site Specific (LLFC 561 & 807)		51.15	1.64	1.64
	563		EHV Site Specific (LLFC 563 & 802)	0.740	1.33	2.84	2.84
	562		EHV Site Specific (LLFC 562 & 769) EHV Site Specific (LLFC 564 & 803)	0.740	1.33 247.28	2.84 1.83	2.84 1.83
	564	TBC					

Annex 2b - Schedule of Export Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users)

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final EDCM export charges

Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Su _l	export per Red t charge b/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	701	1574000216135 1594001005774	EHV Site Specific - Generation Exempt (LLFC 601 & 701)					
	727	MSID_7300	EHV Site Specific (LLFC 604 & 727)			1,060.76	0.05	0.05
	704	1594001073116	EHV Site Specific (LLFC 612 & 704)	(0.347)	1,864.20	0.05	0.05
	709	1594001055250	EHV Site Specific - Generation Exempt (LLFC 614 & 709)					
	710	1594000000038	EHV Site Specific - Generation Exempt (LLFC 619 & 710)					
	711		EHV Site Specific - Generation Exempt (LLFC 622 & 711)					
	804	1574000324772	EHV Site Specific (LLFC 624 & 804)			950.71	0.05	0.05
	748	1594001006893	EHV Site Specific - Generation Exempt (LLFC 625 & 748)					
	729	1574000199083	EHV Site Specific - Generation Exempt (LLFC 627 & 729)					
	728	1594001141547	EHV Site Specific - Generation Exempt (LLFC 637 & 728)					
	759	1574000275033	EHV Site Specific (LLFC 680 & 759)			124.76	0.05	0.05
	760		EHV Site Specific (LLFC 681 & 760)			4,288.82	0.05	0.05
	761	1594000000047	EHV Site Specific - Generation Exempt (LLFC 544 & 761)					
	762	1574000285644	EHV Site Specific (LLFC 682 & 762)	(0.347)	4,424.01	0.05	0.05
	763	1594000000029	EHV Site Specific - Generation Exempt (LLFC 683 & 763)					
	764	1574000298500	EHV Site Specific (LLFC 684 & 764)	(0.161)	3,922.48	0.05	0.05
	765		EHV Site Specific (LLFC 685 & 765)			870.78	0.05	0.05
	766	1574000303940 1574000303959	EHV Site Specific (LLFC 686 & 766)			19,324.06	0.05	0.05
	767	1574000309384	EHV Site Specific (LLFC 688 & 767)			2,000.28	0.05	0.05
	768	1574000309375	EHV Site Specific (LLFC 689 & 768)			3,931.05	0.05	0.05
	782	1574000306374	EHV Site Specific (LLFC 690 & 782)			1,319.30	0.05	0.05
	783	1574000307917	EHV Site Specific (LLFC 540 & 783)	(0.037)	509.42	0.05	0.05
	784	1574000308405	EHV Site Specific (LLFC 541 & 784)	(0.347)	4,703.70	0.05	0.05
	785	1574000315040	EHV Site Specific (LLFC 542 & 785)			313.87	0.05	0.05
	787	1574000324470	EHV Site Specific (LLFC 547 & 787)			2,248.31	0.05	0.05
	788	1574000324461	EHV Site Specific (LLFC 548 & 788)			5,570.24	0.05	0.05
	789	1574000327286	EHV Site Specific (LLFC 549 & 789)			18,212.03	0.05	0.05
	806	TBC	EHV Site Specific (LLFC 560 & 806)			2,715.36	0.05	0.05
	807	TBC	EHV Site Specific (LLFC 561 & 807)			8,866.05	0.05	0.05
	802	1574000324790	EHV Site Specific (LLFC 563 & 802)			126.38	0.05	0.05
	769	1574000324781	EHV Site Specific (LLFC 562 & 769)			126.38	0.05	0.05
	803	TBC	EHV Site Specific (LLFC 564 & 803)			247.28	0.05	0.05
	805	1574000327505	EHV Site Specific (LLFC 565 & 805)	(1.436)	509.00	0.05	0.05

Annex 3 - Schedule of Charges for use of the Distribution System to Preserved/Additional LLFC Classes

	Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final LV and HV tariffs												
NHH preserved charges/additional LLFCs													
	Closed LLFCs PCs Unit charge 1 (NHH) p/kWh PikWh PikWh PikWh												
Notes:	Unit time period	s are as speci	fied in the SSC.										

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2018 - Final LDNO tariffs

Time Bands for Half Hourly Metered Properties										
Time periods Red Time Band Amber Time Band Green Time B										
Monday to Friday (Including Bank Holidays) All Year	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00							
Saturday and Sunday All Year			00:00 to 24:00							
Notes	All the above times are	e in UK Clock time								

Time Bands for H	alf Hourly Unm	etered Propert	ies
	Black Time Band	Yellow Time Band	Green Time Band
Monday to Friday (Including Bank Holidays) November to February Inclusive	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00
Monday to Friday (Including Bank Holidays) April to October Inclusive and March		08:00 to 22:00	00:00 to 08:00 22:00 to 24:00
Saturday and Sunday All year			00:00 to 24:00
Notes	All the above times are	e in UK Clock time	

					Notes		All the above times ar	e in UK Clock time	
Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO LV: Domestic Unrestricted	150	1	1.326			3.19			
LDNO LV: Domestic Two Rate	151	2	1.522	0.583		3.19			
LDNO LV: Domestic Off Peak (related MPAN)	152	2	0.662						
LDNO LV: Small Non Domestic Unrestricted	153	3	1.302			3.44			
LDNO LV: Small Non Domestic Two Rate	154	4	1.429	0.603		3.44			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	155	4	0.660						
LDNO LV: LV Medium Non-Domestic	156	5-8	1.308	0.579		17.13			
LDNO LV: LV Network Domestic	199	0	4.390	1.095	0.575	3.19			
LDNO LV: LV Network Non-Domestic Non-CT	206	0	4.387	1.095	0.576	3.44			
LDNO LV: LV HH Metered	157	0	3.351	0.943	0.566	7.87	1.26	2.93	0.101
LDNO LV: NHH UMS category A	37	8	1.131						
LDNO LV: NHH UMS category B	38	1	1.311						
LDNO LV: NHH UMS category C	39	1	1.960						
LDNO LV: NHH UMS category D	40	1	1.011						
LDNO LV: LV UMS (Pseudo HH Metered)	170	0	11.329	1.065	0.575				
LDNO LV: LV Generation NHH or Aggregate HH	172	8&0	(0.702)						
LDNO LV: LV Generation Intermittent	173	0	(0.702)						0.145
LDNO LV: LV Generation Non-Intermittent	174	0	(4.547)	(0.656)	(0.043)				0.145
LDNO HV: Domestic Unrestricted	158	1	0.799			1.92			
LDNO HV: Domestic Two Rate	159	2	0.916	0.351		1.92			
LDNO HV: Domestic Off Peak (related MPAN)	160	2	0.399						
LDNO HV: Small Non Domestic Unrestricted	161	3	0.784			2.07			
LDNO HV: Small Non Domestic Two Rate	162	4	0.861	0.363		2.07			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	163	4	0.397						
LDNO HV: LV Medium Non-Domestic	164	5-8	0.788	0.349		10.32			
LDNO HV: LV Network Domestic	207	0	2.643	0.659	0.346	1.92			
LDNO HV: LV Network Non-Domestic Non-CT	208	0	2.642	0.659	0.347	2.07			
LDNO HV: LV HH Metered	165	0	2.018	0.568	0.341	4.74	0.76	1.77	0.061
LDNO HV: LV Sub HH Metered	166	0	2.534	0.827	0.564	8.14	1.60	2.73	0.063
LDNO HV: HV HH Metered	167	0	2.304	0.898	0.686	104.96	1.80	3.15	0.051
LDNO HV: NHH UMS category A	41	8	0.681						
LDNO HV: NHH UMS category B	42	1	0.789						
LDNO HV: NHH UMS category C	43	1	1.180						
LDNO HV: NHH UMS category D	44	1	0.609						
LDNO HV: LV UMS (Pseudo HH Metered)	171	0	6.822	0.641	0.346				
LDNO HV: LV Generation NHH or Aggregate HH	175	8&0	(0.702)						
LDNO HV: LV Sub Generation NHH	176	8	(0.593)						
LDNO HV: LV Generation Intermittent	177	0	(0.702)						0.145
LDNO HV: LV Generation Non-Intermittent	178	0	(4.547)	(0.656)	(0.043)				0.145
LDNO HV: LV Sub Generation Intermittent	179	0	(0.593)						0.136
LDNO HV: LV Sub Generation Non-Intermittent	180	0	(3.850)	(0.553)	(0.036)				0.136
LDNO HV: HV Generation Intermittent	181	0	(0.395)			0.00			0.102
LDNO HV: HV Generation Non-Intermittent	182	0	(2.576)	(0.364)	(0.025)	0.00			0.102
		<u> </u>							
LDNO HVplus: Domestic Unrestricted	50	1	0.610			1.47			
LDNO HVplus: Domestic Two Rate	51	2	0.700	0.268		1.47			

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO HVplus: Domestic Off Peak (related MPAN)	52	2	0.305						
LDNO HVplus: Small Non Domestic Unrestricted	53	3	0.599			1.58			
LDNO HVplus: Small Non Domestic Two Rate	54	4	0.658	0.277		1.58			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	55	4	0.304						
LDNO HVplus: LV Medium Non-Domestic	56	5-8	0.602	0.266		7.88			
LDNO HVplus: LV Sub Medium Non-Domestic	0	5-8	1.034	0.457		16.20			
	0	5-8	0.845	0.527		150.50			
LDNO HVplus: HV Medium Non-Domestic					0.265				
LDNO HVplus: LV Network Domestic	209	0	2.020	0.504	0.265	1.47			
LDNO HVplus: LV Network Non-Domestic Non-CT	210	0	2.019	0.504	0.265	1.58			
LDNO HVplus: LV HH Metered	57	0	1.542	0.434	0.261	3.62	0.58	1.35	0.047
LDNO HVplus: LV Sub HH Metered	58	0	1.913	0.624	0.426	6.14	1.20	2.06	0.048
LDNO HVplus: HV HH Metered	59	0	1.724	0.671	0.513	78.52	1.34	2.36	0.038
LDNO HVplus: NHH UMS category A	45	8	0.520						
LDNO HVplus: NHH UMS category B	46	1	0.603						
LDNO HVplus: NHH UMS category C	47	1	0.902						
LDNO HVplus: NHH UMS category D	48	1	0.465						
LDNO HVplus: LV UMS (Pseudo HH Metered)	61	0	5.214	0.490	0.265				
LDNO HVplus: LV Generation NHH or Aggregate HH	62	8	(0.323)						
LDNO HVplus: LV Sub Generation NHH	63	8	(0.332)						
LDNO HVplus: LV Generation Intermittent	64	0	(0.323)						0.067
LDNO HVplus: LV Generation Non-Intermittent	65	0	(2.091)	(0.302)	(0.020)				0.067
LDNO HVplus: LV Sub Generation Intermittent	66	0	(0.332)						0.076
LDNO HVplus: LV Sub Generation Non-Intermittent	67	0	(2.154)	(0.309)	(0.020)				0.076
LDNO HVplus: HV Generation Intermittent	68	0	(0.395)	` '		61.03			0.102
LDNO HVplus: HV Generation Non-Intermittent	69	0	(2.576)	(0.364)	(0.025)	61.03			0.102
LDNO EHV: Domestic Unrestricted	70	1	0.424	(0.00-1)	(0.020)	1.02			0.102
LDNO EHV: Domestic Two Rate			0.487	0.187		1.02			
	71	2		0.167		1.02			
LDNO EHV: Domestic Off Peak (related MPAN)	72	2	0.212			4.40			
LDNO EHV: Small Non Domestic Unrestricted	73	3	0.417			1.10			
LDNO EHV: Small Non Domestic Two Rate	74	4	0.457	0.193		1.10			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	75	4	0.211						
LDNO EHV: LV Medium Non-Domestic	76	5-8	0.419	0.185		5.48			
LDNO EHV: LV Sub Medium Non-Domestic	0	5-8	0.719	0.318		11.26			
LDNO EHV: HV Medium Non-Domestic	0	5-8	0.587	0.366		104.62			
LDNO EHV: LV Network Domestic	211	0	1.404	0.350	0.184	1.02			
LDNO EHV: LV Network Non-Domestic Non-CT	212	0	1.403	0.350	0.184	1.10			
LDNO EHV: LV HH Metered	77	0	1.072	0.302	0.181	2.52	0.40	0.94	0.032
LDNO EHV: LV Sub HH Metered	78	0	1.330	0.434	0.296	4.27	0.84	1.43	0.033
LDNO EHV: HV HH Metered	79	0	1.198	0.467	0.357	54.58	0.93	1.64	0.026
LDNO EHV: NHH UMS category A	183	8	0.362						
LDNO EHV: NHH UMS category B	184	1	0.419						
LDNO EHV: NHH UMS category C	185	1	0.627						
LDNO EHV: NHH UMS category D	186	1	0.324						
LDNO EHV: LV UMS (Pseudo HH Metered)	81	0	3.624	0.341	0.184				
LDNO EHV: LV Generation NHH or Aggregate HH	82	8	(0.224)						
LDNO EHV: LV Sub Generation NHH		8	(0.231)						
LDNO EHV: LV Sub Generation Nnn LDNO EHV: LV Generation Intermittent	83								0.046
	84	0	(0.224)	(0.240)	(0.014)				
LDNO EHV: LV Generation Non-Intermittent	85	0	(1.453)	(0.210)	(0.014)				0.046
LDNO EHV: LV Sub Generation Intermittent	86	0	(0.231)		(0.000)				0.053
LDNO EHV: LV Sub Generation Non-Intermittent	87	0	(1.497)	(0.215)	(0.014)				0.053
LDNO EHV: HV Generation Intermittent	88	0	(0.275)			42.42			0.071
LDNO EHV: HV Generation Non-Intermittent	89	0	(1.791)	(0.253)	(0.017)	42.42			0.071
LDNO 132kV/EHV: Domestic Unrestricted	90	1	0.281			0.68			
LDNO 132kV/EHV: Domestic Two Rate	91	2	0.322	0.124		0.68			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	92	2	0.140						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	93	3	0.276			0.73			
LDNO 132kV/EHV: Small Non Domestic Two Rate	94	4	0.303	0.128		0.73			

Annex 4 - Charges applied to LDNOs with HV/LV end users

	Unique billing identifier	PCs	or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	95	4	0.140						
LDNO 132kV/EHV: LV Medium Non-Domestic	96	5-8	0.277	0.123		3.63			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic	0	5-8	0.476	0.210		7.46			
LDNO 132kV/EHV: HV Medium Non-Domestic	0	5-8	0.389	0.242		69.29			
LDNO 132kV/EHV: LV Network Domestic	213	0	0.930	0.232	0.122	0.68			
LDNO 132kV/EHV: LV Network Non-Domestic Non-CT	214	0	0.929	0.232	0.122	0.73			
LDNO 132kV/EHV: LV HH Metered	97	0	0.710	0.200	0.120	1.67	0.27	0.62	0.021
LDNO 132kV/EHV: LV Sub HH Metered	98	0	0.881	0.287	0.196	2.83	0.55	0.95	0.022
LDNO 132kV/EHV: HV HH Metered	99	0	0.794	0.309	0.236	36.15	0.62	1.08	0.018
LDNO 132kV/EHV: NHH UMS category A	187	8	0.240						
LDNO 132kV/EHV: NHH UMS category B	188	1	0.278						
LDNO 132kV/EHV: NHH UMS category C	189	1	0.415						
LDNO 132kV/EHV: NHH UMS category D	190	1	0.214						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	101	0	2.400	0.226	0.122				
LDNO 132kV/EHV: LV Generation NHH or Aggregate HH	102	8	(0.149)						
LDNO 132kV/EHV: LV Sub Generation NHH	103	8	(0.153)						
LDNO 132kV/EHV: LV Generation Intermittent	103	0	(0.149)						0.031
LDNO 132kV/EHV: LV Generation intermittent	104	0	(0.962)	(0.139)	(0.009)				0.031
				(0.100)	(0.003)				0.035
LDNO 132kV/EHV: LV Sub Generation Intermittent LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	106 107	0	(0.153)	(0.142)	(0.009)				0.035
				(0.142)	(0.009)	20.40			
LDNO 132kV/EHV: HV Generation Intermittent	108	0	(0.182)	(0.169)	(0.012)	28.10			0.047
LDNO 132kV/EHV: HV Generation Non-Intermittent	109		(1.186)	(0.168)	(0.012)				0.047
LDNO 132kV: Domestic Unrestricted	110	1	0.143			0.34			
LDNO 132kV: Domestic Two Rate	111	2	0.164	0.063		0.34			
LDNO 132kV: Domestic Off Peak (related MPAN)	112	2	0.071						
LDNO 132kV: Small Non Domestic Unrestricted	113	3	0.140			0.37			
LDNO 132kV: Small Non Domestic Two Rate	114	4	0.154	0.065		0.37			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	115	4	0.071						
LDNO 132kV: LV Medium Non-Domestic	116	5-8	0.141	0.062		1.84			
LDNO 132kV: LV Sub Medium Non-Domestic	0	5-8	0.242	0.107		3.79			
LDNO 132kV: HV Medium Non-Domestic	0	5-8	0.198	0.123		35.19			
LDNO 132kV: LV Network Domestic	215	0	0.472	0.118	0.062	0.34			
LDNO 132kV: LV Network Non-Domestic Non-CT	216	0	0.472	0.118	0.062	0.37			
LDNO 132kV: LV HH Metered	117	0	0.361	0.101	0.061	0.85	0.14	0.32	0.011
LDNO 132kV: LV Sub HH Metered	118	0	0.447	0.146	0.100	1.44	0.28	0.48	0.011
LDNO 132kV: HV HH Metered	119	0	0.403	0.157	0.120	18.36	0.31	0.55	0.009
LDNO 132kV: NHH UMS category A	191	8	0.122						
LDNO 132kV: NHH UMS category B	192	1	0.141						
LDNO 132kV: NHH UMS category C	193	1	0.211						
LDNO 132kV: NHH UMS category D	194	1	0.109						
LDNO 132kV: LV UMS (Pseudo HH Metered)	121	0	1.219	0.115	0.062				
LDNO 132kV: LV Generation NHH or Aggregate HH	122	8	(0.075)						
LDNO 132kV: LV Sub Generation NHH	123	8	(0.078)						
LDNO 132kV: LV Generation Intermittent	124	0	(0.075)						0.016
LDNO 132kV: LV Generation Non-Intermittent	125	0	(0.489)	(0.071)	(0.005)				0.016
LDNO 132kV: LV Sub Generation Intermittent	126	0	(0.078)						0.018
LDNO 132kV: LV Sub Generation Non-Intermittent	127	0	(0.504)	(0.072)	(0.005)				0.018
LDNO 132kV: HV Generation Intermittent	128	0	(0.092)			14.27			0.024
LDNO 132kV: HV Generation Non-Intermittent	129	0	(0.602)	(0.085)	(0.006)	14.27			0.024
LDNO 0000: Domestic Unrestricted	130	1	0.045			0.11			
LDNO 0000: Domestic Two Rate	131	2	0.051	0.020		0.11			
LDNO 0000: Domestic Off Peak (related MPAN)	132	2	0.022						
LDNO 0000: Small Non Domestic Unrestricted	133	3	0.044			0.12			
LDNO 0000: Small Non Domestic Two Rate	134	4	0.048	0.020		0.12			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	135	4	0.022						
LDNO 0000: LV Medium Non-Domestic	136	5-8	0.044	0.020		0.58			
LDNO 0000: LV Sub Medium Non-Domestic	0	5-8	0.076	0.033		1.19			

Annex 4 - Charges applied to LDNOs with HV/LV end users

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 0000: HV Medium Non-Domestic	0	5-8	0.062	0.039		11.02			
LDNO 0000: LV Network Domestic	217	0	0.148	0.037	0.019	0.11			
LDNO 0000: LV Network Non-Domestic Non-CT	218	0	0.148	0.037	0.019	0.12			
LDNO 0000: LV HH Metered	137	0	0.113	0.032	0.019	0.27	0.04	0.10	0.003
LDNO 0000: LV Sub HH Metered	138	0	0.140	0.046	0.031	0.45	0.09	0.15	0.004
LDNO 0000: HV HH Metered	139	0	0.126	0.049	0.038	5.75	0.10	0.17	0.003
LDNO 0000: NHH UMS category A	195	8	0.038						
LDNO 0000: NHH UMS category B	196	1	0.044						
LDNO 0000: NHH UMS category C	197	1	0.066						
LDNO 0000: NHH UMS category D	198	1	0.034						
LDNO 0000: LV UMS (Pseudo HH Metered)	141	0	0.382	0.036	0.019				
LDNO 0000: LV Generation NHH or Aggregate HH	142	8	(0.024)						
LDNO 0000: LV Sub Generation NHH	143	8	(0.024)						
LDNO 0000: LV Generation Intermittent	144	0	(0.024)						0.005
LDNO 0000: LV Generation Non-Intermittent	145	0	(0.153)	(0.022)	(0.001)				0.005
LDNO 0000: LV Sub Generation Intermittent	146	0	(0.024)						0.006
LDNO 0000: LV Sub Generation Non-Intermittent	147	0	(0.158)	(0.023)	(0.001)				0.006
LDNO 0000: HV Generation Intermittent	148	0	(0.029)			4.47			0.007
LDNO 0000: HV Generation Non-Intermittent	149	0	(0.189)	(0.027)	(0.002)	4.47			0.007

Annex 5 - Schedule of Line Loss Factors

These line loss factors are illustrative based on the latest calculated values and are published in good faith. However, the line loss factors that are approved by the BSC Panel for the applicable year and consequently published on the Elexon website will take precedence and be used in Settlement if they differ from these values.

Time periods	Period 1	Period 2	Period 3	Period 4		
Monday – Friday (Apr- Oct)			00:30 – 07:30	00:00 - 00:30 07:30 - 24:00		
Monday – Friday (Nov)		07:30 – 20:00	00:30 - 07:30	00:00 - 00:30 20:00 - 24:00		
Monday – Friday (Dec – Feb)	16:30 – 18:30	07:30 - 16:30 18:30 - 20:00	00:30 - 07:30	00:00 - 00:30 20:00 - 24:00		
Monday – Friday (Mar)			00:30 - 07:30	00:00 - 00:30 07:30 - 24:00		
Saturday and Sunday All Year			00:30 - 07:30	00:00 - 00:30 07:30 - 24:00		
Notes	All the above times are in UK Clock time					

	Generic demand and generation LLFs							
Metered voltage, respective periods and associated LLFCs								
Metered voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC			
Low Voltage Network	1.094	1.086	1.069	1.076	1, 12, 2, 203, 204, 205, 249, 251, 257, 278, 392, 394, 506, 507, 508, 509, 554, 555, 774, 792, 794, 998, 999			
Low Voltage Substation	1.040	1.039	1.042	1.039	265, 293, 393, 395, 776, 793, 795			
High Voltage Network	1.025	1.024	1.019	1.021	301, 304, 396, 398, 796, 798,			
High Voltage Substation	1.016	1.015	1.014	1.014	691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 777, 778, 779, 780, 781			
Greater than 22kV connected - generation	1.010	1.010	1.008	1.009	803, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825			
Greater than 22kV connected - demand	1.010	1.010	1.008	1.009	564, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 687			

	EHV site specific LLFs								
	Demand								
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC				
Site 1	1.000	1.002	1.004	1.004	601				
Site 2	1.002	1.002	1.002	1.002	603				
Site 3	1.003	1.003	1.003	1.004	604				
Site 4	1.013	1.014	1.020	1.014	605				
Site 5	1.017	1.019	1.053	1.021	606				
Site 6	1.023	1.024	1.047	1.024	607				
Site 7	1.030	1.037	1.106	1.041	608				
Site 8	1.006	1.005	1.007	1.006	609				
Site 9	1.010	1.010	1.012	1.013	611				
Site 10	1.005	1.004	1.003	1.004	612				
Site 11	1.000	1.000	1.083	1.076	613				
Site 12	1.014	1.013	1.012	1.011	614				
Site 13	1.004	1.004	1.004	1.004	615				

Annex 5 - Schedule of Line Loss Factors

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Site 14	1.004	1.004	1.003	1.004	616
Site 15	1.006	1.006	1.006	1.007	617
Site 16	1.012	1.012	1.011	1.011	618
Site 17	1.032	1.014	1.012	1.014	619
Site 18	1.000	1.000	1.000	1.000	620
Site 19	1.018	1.019	1.057	1.029	621
Site 20	1.027	1.022	1.027	1.021	622
Site 21	1.007	1.007	1.007	1.007	624
Site 22	1.017	1.017	1.015	1.016	625
Site 23	1.005	1.004	1.005	1.005	627
Site 24	1.107	1.070	1.028	1.031	626
Site 25	1.019	1.018	1.013	1.015	628
Site 26	1.008	1.008	1.008	1.008	631
Site 27	1.006	1.006	1.006	1.006	632
Site 28	1.020	1.020	1.019	1.019	633
Site 29	1.009	1.009	1.010	1.009	637
Site 30	1.114	1.108	1.096	1.099	680
Site 31	1.052	1.047	1.039	1.045	681
Site 32	1.003	1.003	1.004	1.004	544
Site 33	1.003	1.003	1.003	1.003	682
Site 34	1.000	1.014	1.023	1.022	683
Site 35	1.008	1.008	1.009	1.009	684
Site 36	1.008	1.008	1.007	1.007	685
Site 37	1.004	1.007	1.003	1.007	686
Site 38	1.094	1.073	1.137	1.106	688
Site 39	1.178	1.170	1.153	1.152	689
Site 40	1.123	1.137	1.129	1.123	690
Site 41	1.032	1.013	1.019	1.014	540
Site 42	1.004	1.004	1.003	1.003	541
Site 43	1.001	1.001	1.001	1.001	542
Site 44	1.072	1.078	1.062	1.039	543
Site 45	1.251	1.175	1.947	1.536	545
Site 46	1.010	1.010	1.008	1.009	547
Site 47	1.053	1.048	1.036	1.048	548
Site 48	1.010	1.010	1.008	1.009	549
Site 49	1.010	1.010	1.008	1.009	560
Site 50	1.010	1.010	1.008	1.009	561
Site 51	1.062	1.056	1.048	1.052	563
Site 52	1.174	1.159	1.127	1.136	562
Site 53	1.010	1.010	1.008	1.009	565

	EHV site specific LLFs							
	Generation							
Site	Site Period 1 Period 2 Period 3 Period 4 Associated LLFC							
Site 1	0.996	0.996	0.997	0.996	701			
Site 2	1.000	1.000	1.000	1.000	727			
Site 3	1.003	1.003	1.001	1.002	704			
Site 4	0.992	0.992	0.992	0.992	709			

Annex 5 - Schedule of Line Loss Factors

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Site 5	1.020	1.019	1.000	1.017	710
Site 6	0.988	0.988	0.978	0.986	711
Site 7	1.010	1.010	1.008	1.009	804
Site 8	1.014	1.016	1.006	1.013	748
Site 9	0.995	0.995	0.995	0.995	729
Site 10	1.000	1.000	1.000	1.000	728
Site 11	1.003	1.001	1.000	1.004	759
Site 12	0.997	0.996	0.992	0.995	760
Site 13	1.000	1.000	1.000	1.000	761
Site 14	1.003	1.003	1.002	1.002	762
Site 15	0.982	0.982	0.981	0.983	763
Site 16	0.995	0.994	0.992	0.992	764
Site 17	1.000	1.000	1.000	1.000	765
Site 18	0.998	0.998	0.998	0.998	766
Site 19	1.045	1.042	1.034	1.036	767
Site 20	1.042	1.039	1.030	1.033	768
Site 21	1.004	1.005	0.999	1.002	782
Site 22	0.999	0.999	1.000	0.998	783
Site 23	1.000	1.000	1.002	1.002	784
Site 24	1.000	0.999	0.999	0.999	785
Site 25	1.010	1.010	1.008	1.009	787
Site 26	1.000	0.999	0.993	0.997	788
Site 27	1.010	1.010	1.008	1.009	789
Site 28	1.010	1.010	1.008	1.009	806
Site 29	1.010	1.010	1.008	1.009	807
Site 30	1.025	1.019	1.010	1.010	802
Site 31	1.028	1.019	1.010	1.010	769
Site 32	1.010	1.010	1.008	1.009	805

Annex 6 - Addendum to charging statement detailing charges for new Designated EHV Properties

Nodal costs can be found in the spreadsheet that accompanies this statement.